ABSTRACT OF THE DISCLOSURE

The present invention is directed to a generic, object-oriented library of generators and operations on generators. The library of generators and other objects provides a set of reusable components that can be used in the development of other components required for new risk management generation models. Using basic simple objects predefined in the library and the operations on these objects, complicated objects required for a new risk management generation models may be built more efficiently and easily. In one aspect of the present invention, there is provided a generator for use in developing risk management software, where the generator produces elements of a sequence governed by a sequential process, where the generator comprises a common generator interface, and where the common generator interface comprises a first function that generates the next element of the sequence, and a second function that returns the element most recently generated by the first function, and where the generator can participate with at least one other operand in an expression to produce a second generator.